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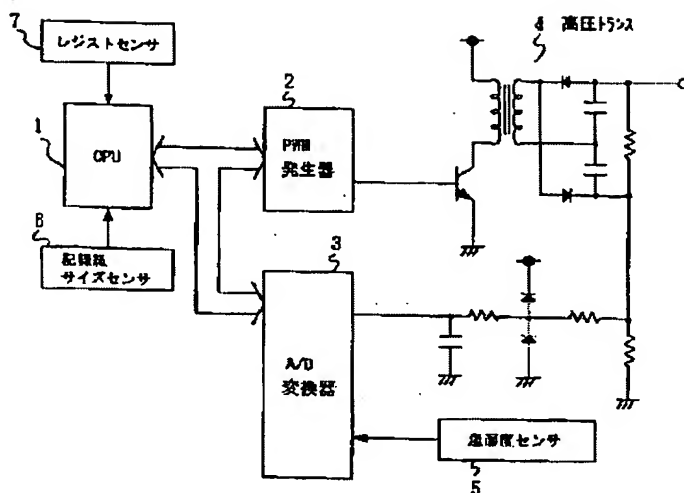
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TITLE : HIGH-VOLTAGE POWER SUPPLY



ABSTRACT : PROBLEM TO BE SOLVED: To attain high-voltage power supply having wide ranges of output and load and no influence on image quality.

SOLUTION: A PWM generator 2 drives a high-voltage transformer 4, by turning on an off a switching transistor and feeds back the output applied to a high-voltage terminal to an A/D converter 3 for monitoring. As a result, a CPU 1 controls the overall apparatus and computes and updates driving conditions of the high-voltage power supply in the timer interruption at prescribed intervals. Additionally, an output value of high voltage output is fed back and a PWM ratio is derived, based on a pulse modulation ratio (PWMduty) of the output value and the high-voltage transformer-output characteristics for controlling the ratio. Computation updating for bringing the output near a target value is thereby performed at prescribed intervals, and the ON ratio of the pulse is taken at prescribed intervals which are set arbitrarily. It is thus possible to generate a high voltage for performing control lower than the resolution of the minimum PWM, thereby traducing is possible over a wide range of load, improving image quality at low cost.

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